



National
Library
of Medicine



My NC
[Sign In] [Regis]

All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Bool

Search PubMed

for

Go

Clear

Limits

Preview/Index

History

Clipboard

Details

Display

Abstract

Show

20

Sort by

Send to

About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

My NCBI (Cubby)

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

1: Bioorg Med Chem Lett. 2004 Jun 7;14(11):2927-30.

Related Articles, Links

ELSEVIER
FULL-TEXT ARTICLE

Synthesis and DNA binding properties of dioxime-peptide nucleic acids.

Mokhir A, Kramer R, Voloshin YZ, Varzatskii OA.

Anorganisch-Chemisches Institut, Ruprecht-Karls-Universitat Heidelberg,
Im Neuenheimer Feld 270, 69120 Heidelberg, Germany.
andriy.mokhir@urz.uni-heidelberg.de

Peptide nucleic acids (PNAs) C- or N-modified with dioxime ligands were prepared by solid-phase synthesis using iron(II)-clathrochelates as protected dioxime building blocks. These PNA bind complementary DNA sequence specifically, though with much reduced affinity in comparison with nonmodified PNA. The dioxime-PNA conjugates bind Cu²⁺ and Ni²⁺ at microM concentration.

PMID: 15125961 [PubMed - indexed for MEDLINE]

Display Abstract

Show

20

Sort by

Send to

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Mar 29 2005 17:30:14



National
Library
of Medicine



My NC
[Sign In] [Regis]

All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Book

Search PubMed

for

Limits

Preview/Index

History

Clipboard

Details

Display

Abstract

20

About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

My NCBI (Cubby)

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

1: Bioorg Med Chem. 1998 Mar;6(3):315-22.

Related Articles, Links

ELSEVIER
FULL-TEXT ARTICLE

Synthesis and hybridization properties of an acyclic achiral phosphonate DNA analogue.

Kehler J, Henriksen U, Vejbjerg H, Dahl O.

Department of Chemistry, H. C. Orsted Institute, University of Copenhagen, Denmark.

Protected N-(2-hydroxyethyl)-N-(nucleobase-acetyl) aminomethanephosphonic++ acid (6a-d) of all four DNA nucleobases have been prepared and oligomerized by solid-phase synthesis. Four DNA decamers containing 1-10 of these 'PPNA' monomers were prepared and evaluated by Tm measurements (medium salt) for binding to their DNA and RNA complements. One central modification reduced the binding strongly ($\Delta T_m = -10$ degrees C), but contiguous PPNA monomers gave smaller effects, and the all-PPNA decamer bound to RNA with a ΔT_m of -1.2 degrees C per modification. Thus PPNA oligomers are inferior DNA and RNA binders compared to the closely related and strongly binding PNA oligomers.

PMID: 9568285 [PubMed - indexed for MEDLINE]

Display Abstract

20

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)